

5.7 CARDIOVASCULAR DISORDERS

1. Congenital and Structural Heart Defects

Congenital Defects

- a defect that exists at birth
- some defects are minor, some can heal on their own, but some are life threatening
- patent ductus arteriosus: in some babies the duct between the aorta and pulmonary trunk remains open (it is open while in the womb because the baby gets its oxygen from mom, and the blood does not need to circulate to the lungs)

Septal Defects

- a opening found in a septum within the heart
- allows the oxygenated and deoxygenated blood to mix

Valve Defects

- a valve does not function properly and is unable to completely close
- this allows blood to flow backward within the heart at the location of the affected valve
- commonly called a “heart murmur”

2. Arrhythmia's

- general term that refers to an abnormality or irregularity in the heart rhythm
- can be caused by: caffeine, nicotine, alcohol, drugs, anxiety, heart disease
- pacemaker – SA node is not firing properly

3. CAD (coronary artery disease) and Arteriosclerosis

- CAD refers to the coronary arteries whereas arteriosclerosis refers more to the body in general
- Buildup of plaque deposits within the artery which can lead to blockage
- In the heart this can lead to angina - temporary loss of blood supply, or heart attack (myocardial infarction) – a complete and permanent loss of blood supply that leads to death of that part of the heart muscle that was being supplied
- Angioplasty and open heart bypass surgeries

4. Embolism and Thrombus

Thrombus

- A clot that has formed in an unbroken blood vessel

Embolism

- An obstruction of a blood vessel by an embolus (A blood clot, partial blood clot, an air bubble, or other debris transported by the blood)

5. Stroke or CVA (cerebrovascular accident)

- Death of brain tissue resulting from a disruption in the blood vessel that supplies that area of the brain – can be due to a blocked vessel or a vessel that begins to bleed.

6. Aneurysm

- A thin weakened section of a blood vessel wall that leads to a saclike enlargement
- If an aneurysm goes without treatment, it can grow larger and larger and eventually burst, causing significant bleeding

7. Hypertension (high blood pressure)

- Most common disease affecting the heart and blood vessels; affects 1 out of 5 adults